

## Fine Pavement for Queensboro Bridge

City Labor Laying Surface That Will Stand Traffic.

PROPER FOUNDATION SOLVES OLD PROBLEM

Reinforcements Below and Timbers Laid Lengthwise Will End "Prop Ups."

By C. E. T. SCHARFS.

It looks as if the Queensboro Bridge were to have a foundation at last that will stand up under the heavy traffic that constantly rolls over this structure. More than a year ago Edward A. Byrne, chief engineer of the bureau of plants and structures, acting under the direction of Commissioner F. J. H. Kracke, laid down a trial stretch of 900 feet of wood block pavement on a new type of foundation, and after being used throughout much of the summer and a winter that was the severest possible test on a pavement it was inspected by a committee of engineers representing all the boroughs, and showed no deterioration. It is this type of foundation which is now being installed.

Those who have used the Queensboro Bridge as an automobile exit from New York are thoroughly familiar with the uniformly bad surface it has presented. Thousands of dollars have been spent annually on patching the wood block. Every winter has seen upheavals in the road surface, so that it looked like the "Witching Waves" of Coney Island. It took quite a time for the authorities to realize that the fault was not with the pavement, but with the way it was laid, and then it took a little longer for the department to devise a better pavement. After that it was a matter only for Commissioner Kracke to get the money from the Board of Estimate to carry out the work.

The present operations are remarkable in that they are being carried out by city department labor entirely. The Board of Estimate appropriated \$144,000 for the work, but before the contractors had been let the price of lumber and steel had advanced so much that the work will not stay within that limit. It is probable that it will cost nearer \$200,000, but as it appears that the work when completed will be permanent and satisfactory, it surely will be worth the expenditure.

The work of laying a new pavement on a better foundation has progressed so far that before December 1 there will be a strip one-half the width of the bridge all the way from New York to the Queens side. No concrete can be laid properly in freezing weather, so that through the winter the workmen will keep at the job of drilling through the buckled plates in order to attach the reinforcing angles which form a very important part of the new work, as done by Mr. Byrne.

Before summer of next year the surface will be completely finished, and what has heretofore been and still is a nuisance to all motorists who go out Long Island way will be a smooth and pleasant highway.

The great trouble with laying a proper foundation for wood block on the bridge has always been the shallowness of the foundation plates. If a very heavy body of concrete were laid it would add so much dead weight to the bridge as to be dangerous, but the fundamental defect in trying to lay a pavement for the Queensboro Bridge was that an attempt was made to lay a sheet of concrete from one side to the other and then place the wood blocks on it supported by a thin coating of sand and cement.

The diagram showing the old and new construction of the bridge, as given here, shows where the greatest point of weakness was. The concrete was laid directly on top of the longitudinal iron stringers, as well as in the basin-like hollows of the buckled plates.

Naturally there was a thin surface of concrete above the stringers which did not stand up under the impact of heavy loads. This concrete might have done well for a limit of ten tons, but vehicles of fifteen and twenty tons

passed over the bridge, and that soon broke down this thin layer.

Also the transverse lines of the buckled plates did not stand up under the weight, and a deflection in some cases of as much as three-eighths of an inch was found in them. Naturally any such deviation from the line meant that the concrete soon broke up under the weight of traffic. Also it was found that the concrete combination was not heavy enough, and further, more was not properly drained so that moisture seeping down through the wood blocks could find no proper outlet and caused the pop-ups when winter weather came on.

Mr. Byrne's solution of the problem has been accomplished in two ways. First of all he has placed a reinforced angle under the transverse lines of the buckled plates, so that they are stiff and will not yield as they did before. Secondly, he has separated the mass of concrete laid in between the timbers, as shown in the illustration herewith. In setting the concrete a hole is left which leads directly to the river below the bottom of the plate. Grooves are made in this concrete, as can be seen from the pictures, so that when it rains or when moisture gathers it can readily be drained off to the river below. "Z" bars at regular intervals act as expansion strips for the pavement.

There is a greater volume of concrete, forming a better foundation, and the wood blocks, instead of being 4 inches and 3 inches. The whole height of the top of the road surface from the bottom of the buckled plate is considerably greater than it was before. It is obvious that the whole structure is more rigid and forms a better surface than the bridge has had.

### AUTO MAKERS DRAW FOR SPACES AT SHOWS

More than 100 automobile manufacturers were represented at the recent meeting of the National Automobile Chamber of Commerce to draw for space for the annual shows which will be held in New York at the Grand Central Palace, beginning January 6, and at the Coliseum, in Chicago, beginning January 20.

Among others, space was allotted to the following cars: Willys Overland, Buick, Studebaker, Dodge, Maxwell, Cadillac, Chevrolet, Chalmers, Austin, Kline, Reo, Oakland, Watson, Packard, Saxon, Hudson, Dorr, Westcott, Briscoe, Anderson, Milburn, Woods, Old, Pierce-Arrow, Stearns, Chandler, Olds, Mitchell, Pathfinder, Hackett, Peerless, F. I. T. Auburn, Paige, Franklin, Mohr, Cole, Kellie, Premier, Lexington, Cunningham, National, Pullman, Glide, Briggs-Detroit, McFarlin, Grant, Allen, King, Kissel, Hupp, Case, Scripps, Booth, Marmon, Monroe, Lozier, Elkhart, Nash, Consolidated, Interstate, Regal, Mercer, Baker, Haynes, Stutz, Apperson, Moon, Empire, Lewis, Mutual, Paterson, Jackson, Crow, Davis, Standard Eight, Liberty, Enger, Sterling, Harlan, Princess, Chicago, Drexel, Jordan, Monitor, Metz, Ben Hur, Dey, Elgin, Roamer, Emerson, American, Dixie, Classic, Kent, Sun, Doble Steam, Stephens and H. A. L.

The shortage of freight cars, as reported by the American Railway Association, indicates that they were 14,000 cars short on September 1. The traffic committee of the chamber is endeavoring to protect the traffic supply of members by having automobile cars returned promptly to the manufacturing territory. There are now approximately 70,000 automobile cars in service, with 7,900 more under construction orders. Carload shipments of automobiles for the month of September were 21,600, as against 18,940 for the same month last year.

### MORSE IS CHALMERS VICE-PRESIDENT NOW

E. C. Morse has resigned as sales manager of the Hudson Motor Car Company, of Detroit, to take the place with the Chalmers Motor Company left vacant by the death of Paul Smith. That means he is in charge of sales, service and advertising and is also a vice-president of the Chalmers Company.

The announcement is of especial interest because Morse was one of the men who in 1909 left the Chalmers organization to form the Hudson company.

## How New Pavement for Queensboro Bridge Is Being Laid



This shows how the longitudinal timbers are bolted on. The buckled plates as they are before concrete is set.

### Notes at Random

Here's a true get-rich-slowly story: Some years ago, probably at least ten, a man went to work in one of the large tire companies as a mechanic. He had \$200 saved up and it seemed to him an appropriate thing to invest in the company he was working for. So he bought two shares of stock at par. A few years thereafter a stock dividend of 5 to 1 was declared. That brought his holdings up to ten shares. Later on a further stock dividend of 8 to 1 was declared. That brought him up to eighty shares. The latest quotation on this stock is \$1,050 a share. In other words, this workman now has \$84,000 to show for his original investment of \$200.

The Police Department, under the ordinance requiring dealers in second-hand goods to make daily reports on goods taken in, is asking automobile dealers to fill out cards. The dealers, however, are not making such returns, because the ordinance is interpreted by them as not applying to cars taken in in part payment for, or as deposit on new cars sold. The regulation dealers in second-hand cars, however, are supposed to make such returns. If a dealer or in new cars sells a second-hand car out of his stock of used cars and takes a used car in part payment, he has to make a return. It's a bit complicated, but dealers in new cars recent chiefly being classed with junk dealers, etc. So for that matter do the dealers in second-hand cars, but these latter do not appear to have any way out.

Only a couple of the automobile agencies that do not represent trucks as well as passenger cars use regular motor trucks of an outside make for service wagons. Most of the agents use a converted touring car chassis with a wagon body on it. As a matter of fact, a regular truck is better fitted for the work, and using it is no reflection on the touring car chassis. Inasmuch as these agents do not sell trucks, there is no good reason why they should feel that buying a standard truck indicates in any way that they haven't a proper dependence on the goods they sell. And a regular truck makes a better appearance than a made-over touring car of ancient vintage.

It always has been rather a mystery to us why traffic men do not call down severely pedestrians who start across the roadway at the Brooklyn Bridge when the policeman has held up his hand against them so as to let some car go on its way to Brooklyn. If a motorist came along in his car against such a signal what a bawling out he would get! It is dangerous in the extreme for pedestrians to ignore the signals made by the policeman, because the automobilist governs himself by the signals and is likely to be

Innocently the cause of serious accident. Anyway, why should not the policeman, having given the automobile driver the sign that his road is clear, see to it that no pedestrians run across the path? There should be traffic regulations for those on foot, too.

Croyden Flats, N. H., boasts of the most determined Ford purchaser, probably, on record. This man, after protracted negotiations, succeeded in getting a second hand Ford in exchange for the following articles: Sixteen Yorkshire pigs, two horses, two cows, three two-year-old heifers, three calves, one horse rake, one horse hoe and one cultivator.

### RAINIER MOTOR TRUCK MAKES ITS APPEARANCE

John T. Rainier and Paul N. Lineberger, who used to compose the R. & L. Co., that handled Garford trucks, are now in business for themselves as the Rainier Motor Corporation. A factory for the manufacture of a 1,000-pound truck is in course of erection at Flushing, and salesrooms have been opened at Broadway and Fifty-first street, where they have samples on view. Until the factory is finished both wholesale and retail business will be done at the Broadway showrooms. Rainier, by whose name the truck is called, is president and general manager of the company; Lineberger is vice-president and sales manager and Jack Rainier is secretary and manager of the New York branch. Carl Neracher, formerly chief engineer for the Garford and Willys-Overland companies, designed the truck.

The chassis is practically a duplicate, on a smaller scale, of several well known American heavy trucks, in fact of following touring car practice. This is new as applied to light delivery vehicles. All the units and parts are made oversize, and therefore the factor of safety is very great. The speed of the truck has been limited to thirty miles an hour. Various open and closed body styles are supplied, as well as jitney buses and taxicabs.

## Trade News and Notes

G. Franklin Bailey has been made general manager of an association to control the Cook patent on truck attachments for converting touring cars into trucks. This is the basic patent, and is the one under which the Redden Motor Truck Company is operating, and which the Redden company controls.

A suit entered against the Smith Form-A-Truck Company, of Chicago, to establish the validity and scope of the patent has been settled by the Smith company agreeing to take out a license and to pay royalties on all trucks made. This practically establishes the standing of the Cook patent as the basic patent controlling the manufacture of all devices for converting pleasure cars into trucks by means of a truck frame, axle, springs, wheels and tires, composing a unit so designed as to slide over and bolt to the pleasure car frame, thus relieving the pleasure car axle of all load.

The manufacture of these "truck-maker" attachments has already grown into enormous proportions, and, although the business is only about a year old, there are several manufacturers engaged in it whose output runs into millions of dollars.

The association that has developed, of which Bailey is manager, is to be something along the lines of the old A. L. A. M., which was largely responsible for the developing and standardizing of the present automobile industry.

W. F. Sternberg, who successfully disposed of the Liberty Motor Car Company before it became an agency, is now sales manager for Colonial Motors, the Metropolitan representatives of the Liberty car. In making this appointment, John F. Plummer, president of Colonial Motors, did approximately what C. T. Silver did in appointing Rodney K. Haines, manager of his used car department, as sales manager in charge of the new car department of the Chalmers and Dorr agency.

On moving to new quarters on Broadway, at Fifty-third street, formerly occupied by the Liberty Motor Car Company, he started as a traveler in Oklahoma for the P. & O. Plough Company, and became sales manager of that company. In 1911 Kilborn left the farm implement business to become branch manager in Kansas City for the Mitchell-Lewis Motor Company. From this he went to Chicago to become branch manager of the General Motors Truck Company. Two and a half years ago Kilborn was appointed manager of the Oakland Motor Company's Chicago wholesale branch, and in that capacity had charge of the distribution of Oakland cars in the Central West.

The motor car of the future will be built almost solely from pressed steel, declares Ray Harroun, in charge of the engineering and production of the new Harroun Motors Corporation. Harroun says that his new car will contain a greater proportion of pressed steel than any design now on the market. He draws the conclusion that, within a few years, the product of dies and presses will largely displace such materials as gray-iron and malleable castings, aluminum, wood, brass, bronze and a large proportion of the forgings now used in automobile construction.

Albert N. Atkinson, principal of the Stearns Automobile School, and Peter J. McDonald, a salesman of automobiles, will open on October 15 the People's Garage on West Fifth Street, near Broadway. In addition to floor space for the storage of 100 cars in the building, there will be a supply department and a machine shop.

The new Doble steam cars being built by the General Engineering Company, of Detroit, will be seen for the first time at the New York show in January. A new branch of the Times Square Auto Supply Company has been opened at 80 Nassau Street, in the financial district, to sell automobile accessories and supplies.

George S. Morrow, president of the new Saxon Motor Corporation of New York, has appointed William H. Crowley as manager of the wholesale department. Crowley has had a good many years' experience in handling the

territorial end of the business in the metropolitan district and has a large acquaintance among the dealers.

The Pennsylvania Rubber Company announces a new reduced schedule of prices on all tires which went into effect on October 1.

A new service and parts department, at 245 to 249 West Fifty-fifth Street, has been opened by the King selling branch here. The service department is in charge of A. T. Hiscox.

Richard Ogden Burr, formerly of Burr & Co., body builders, has joined Sam W. Menefee as a member of the sales department of the Detroit Electric Car Co., New York.

The Hurlburt Motor Truck Company announces the receipt of an order for some hundreds of thousands of dollars' worth of trucks for export. A large part of this order is for the seven-

Laying the wood block on the new foundation. Note the grooves in the concrete leading to the drain holes.

### MAKERS TO ADJUST HEADLIGHTS' RIGHT

Automobile makers are now turning their attention to the matter of glaring headlights. The National Automobile Chamber of Commerce last week, discussing the use of lights on the road, came to an agreement that makers should arrange such lights so that the beams will show not more than forty-two inches above the ground at a distance of seventy-five feet.

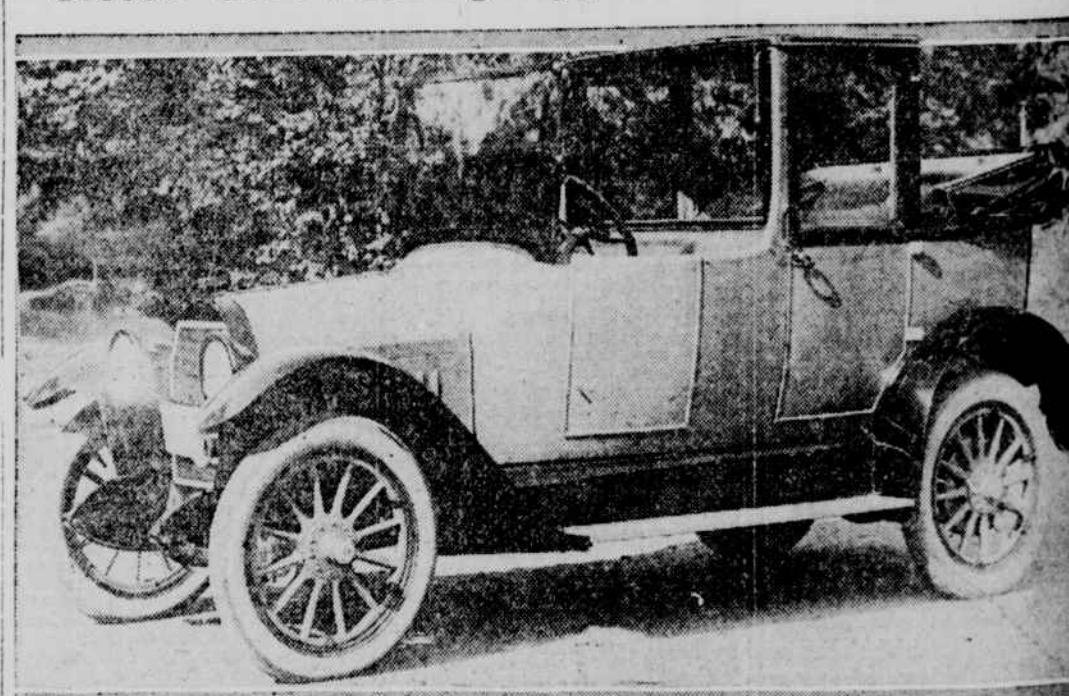
Many states have legislated against the use of glaring headlights, and it is only a question of a short time when no community will permit their use. Therefore the makers are merely taking a step in time.

### ELECTRIC CARS ON A SOCIABILITY RUN

The second semi-annual "sociability run" of the New York Electric Vehicle Association was made last Wednesday from Sixty-second Street and Central Park West to Longue Vue, near Hastings-on-Hudson, and return. The forty-seven cars participating were exclusively electric. The majority of the cars were driven by their women owners.

Among those participating in the affair were Dr. and Mrs. D. McCulliff, Mr. and Mrs. S. W. Menefee, E. P. Chaffant, Eastern sales manager of the Detroit Electric; Arthur Williams, Miss Dolores Duncan, George Leland

## Closed Cars Making Appearance on Auto Row



The automobile shown here is one of the new line of closed cars that automobile dealers are displaying. It is a landulet on the Stearns-Knight four cylinder chassis.

### SAXON DEALERS SOLD THEMSELVES FIRST

George S. Morrow, president and general manager of the Saxon Motor Car Corporation of New York, said recently: "Perhaps we were over-cautious in our investigations of Saxon cars before signing a contract to distribute them in New York, but we believe results experienced warranted our time and trouble in going to the very bottom of this matter. We investigated the manner in which Saxon cars were given service to their owners. We wanted to know that Saxon stood up as well in Keokuk, Iowa, as in Chicago. We got evidence about speed, power, gasoline flexibility, riding comfort and gasoline economy. We got absolute data as to how well Saxon cars stood up in actual service."

"After investigating Saxon owners we interviewed Saxon dealers—men who have sold thousands of cars. We asked them what their verdict was in the light of their experience. Then we got together and compared the reports of our investigations. Our own belief as to Saxon values was confirmed by those who sold and those who bought."

"We invested our capital in the Saxon Motor Corporation of New York on the one belief that the Saxon product is right and that we will be able to tell the people of New York on our belief."

Hunter, Mrs. O. W. Smith, Mr. and Mrs. Walter Neumann, Mr. and Mrs. Herman Acher, Mrs. W. D. Batschels, Mr. and Mrs. Gail Burt, Mr. and Mrs. Albert Brown, Mrs. Drake, Miss Dadds, Mr. and Mrs. Sol Dreyfuss, Mr. and Mrs. E. A. Darby, Mr. and Mrs. Chester Fulmer, Mr. and Mrs. M. F. Graham, Mr. and Mrs. G. C. Frissell, Mrs. E. M. Gibson, Mr. and Mrs. R. F. Green, Dr. Ward B. Hoag, Mrs. Hilbert, Douglas Harwood, Miss Boardman, Mr. and Mrs. George Hunter, Miss J. M. Johnson, Mrs. Charles S. Keene, Mrs. Harold C. Matthews, Dr. George A. Maurer, Dr. Howard Gillespie Myers, Mr. and Mrs. Donald McLean, Joseph Marsh, Miss Estelle Miller, Mrs. Morris Myers, Clarence A. Pratt, Mr. and Mrs. N. Daniel Platt, Mrs. Jessabelle Rode, Mrs. Otto Rothlisberger, Mr. and Mrs. Harvey Robinson, Mr. and Mrs. R. W. Rhodes, Mrs. Schmoll, Mrs. Julius Sonn, Robert Schutte, Henry Stemm, Mrs. Sydney W. Stern, Mrs. Sheehan, Mrs. L. G. Strensky, Mr. Hambleton, Mrs. Shotwell, Mr. and Mrs. S. A. Tolman, Mrs. A. P. Thorn, Mr. Stoddard, Dr. Leonard G. Ober, Mrs. E. E. Wolcott and Mrs. Wolf.

### 60-Year-Old Pair on Long Tour.

Two of the most enthusiastic cross-continent tourists in the United States are E. B. Sweazy and his wife, of Fresno, Cal. Sweazy is more than sixty years old, but they are making a 10,000 mile circle tour of the United States in an Oldsmobile and they are camping by the roadside whenever the weather permits. They started last March and expect to complete their journey about Christmas. The Sweazys came East on the Lincoln Highway to Chicago, then drove to Syracuse, N. Y., where they visited relatives, and then through New York and Washington. They are in the East at the present time. Other points on their route are Augusta, Ga., New Orleans, El Paso and Los Angeles.

## THE HARKNESS RACE OCTOBER 28

100-Mile Event at Sheep-head Bay for \$10,000 Purse.

LAP PRIZES OFFERED AFTER FIRST 10 MILES

Twenty-two Entries Now Assured — Shorter Events on Card.

The Harkness Trophy race at 100 miles and a fifty-mile special event will make up the card for an afternoon of automobile racing at the Sheep-head Bay Speedway on October 28. For the 100-mile race a purse of \$10,000 has been hung up by the donor of the trophy, Harry S. Harkness. In addition, there are \$2,500 in bonuses offered as lap prizes. These are to be split 50-50 between the driver and mechanic of the cars leading at the designated points.

The crews of the cars leading at 10, 20, 30, 40, 50, 60, 70, 80 and 90 miles will split \$100. The leading car at the half distance, fifty miles, will get \$250. The leaders at all laps from ten miles to ninety, except those given above, will take down \$50 each time. With such inducements offered the race should be a fast one. The prize money offered will go: First, \$4,000; second, \$2,500; third, \$1,500; fourth, \$1,000; fifth, \$600; and sixth, \$400.

Immediately after the main event the fifty-mile special for non-winners in the Harkness race will be run. A prize of \$2,500 is offered for this event. About thirty drivers have signified their willingness to start in the Harkness race.

By winning the Astor Cup race Johnny Aitken now leads for the title of champion motor car driver of America. He has 2,520 points. Darr Resta, who did not finish the Astor Cup, has 2,400 points. Eddie Rickbacher is third with 1,990 points. Ralph De Palma is fourth with 1,790 points.

The title carries with it the Beech trophy and about \$5,000 in cash, so it is worth while fighting for.

Two of the Goodyear Cord tires which Aitken had on his Peugeot in the Astor Cup race, when he covered the 250 miles at the rate of 104.23 an hour, were the ones which helped him to win the 300-mile sweepstakes at Cincinnati on Labor Day, at the dedication of the Sharonville Speedway.

The Goodyear Company has been equipping racing cars with tires only a few months. The carcass of the tire used on the racetrack is standard-made up in the regular way—and is the same carcass in Goodyear Cord for pleasure cars. The difference is in the thickness of the tread and the method of curing.

### FORD JOKERS KEEP STENOGRAPHERS BUSY

That humorist who seems to be devoting his life's work to originating and circulating stories as to the Ford car, is starting in on his winter crop. This is very strikingly demonstrated by the truckloads of mail received these autumn days by the Ford Motor Company. Letters by the hundreds and thousands are coming from all parts of the world, asking for con-

firmation of these ridiculous stories.

Some of the rumors circulated are these: That Mr. Ford is to sell Ford cars for \$100 each on his birthday; that Mr. Ford is to sell Ford cars for \$100 each on his wedding day; that Mr. Ford is to sell Ford cars for \$100 at a certain hour all over the country; that Mr. Ford is to sell Ford cars for \$100 each, provided one million individuals send in their names with \$1 enclosed; that Mr. Ford will send in four times the mint letters of which sell F O B D; that Mr. Ford is to sell Ford cars for \$100 each on the day that "Virginia goes dry."

These stories are by no means humorous to the army of clerks and stenographers whose daily grind is to deny that Ford cars are sold at any time at less than advertised prices. And these assurances from the factory that cars can be purchased from the Ford agent in the neighborhood community just as cheaply as the factory or anywhere else do not fully convince correspondents that they have not found a way to possess a new Ford car by some lucky chance at some wonderful reduction from regular prices.

HAVE THE LUBRICATION ON YOUR AUTOMOBILE INSURED

The use of the right grease and oil is vital to all the moving parts and to the life of the car.

Expert service with the best lubricants available.

Call at write to us.

THE GREASE SPOT INC.

204 W. 7th St.

Phone October 1916

This is a part of the salesroom of C. T. Silver, Inc., as arranged for a special view of Chalmers and Dorr cars. To the left is a brougham mounted on a Chalmers chassis, which was the marked feature. It is in French gray and is marked by a new design nickel radiator. The exhibit also included a five-passenger Dorr touring, a special color and equipped Dorr touring, three Chalmers closed cars, interiors by Lady Duff Gordon; a special Chalmers roadster, a special Chalmers touring, with Victoria top; a special Chalmers Cloverleaf, a special Chalmers town car, a special Chalmers touring and a special Peerless, with Victoria top.



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